

Translation

PATENT COOPERATION TREATY

PCT/JP2003/016244



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCTF176	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2003/016244	International filing date (day/month/year) 18 December 2003 (18.12.2003)	Priority date (day/month/year) 25 December 2002 (25.12.2002)
International Patent Classification (IPC) or national classification and IPC C23C 14/34, 14/00, B01J 3/00		
Applicant ABE, Takayuki		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of        sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 18 December 2003 (18.12.2003)	Date of completion of this report 02 July 2004 (02.07.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

Form PCT/IPEA/409 (cover sheet) (July 1998)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/016244

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

☒ the international application as originally filed

☐ the description:

pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

☐ the sequence listing part of the description.

pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

☐ the language of publication of the international application (under Rule 48.3(b)).

☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-19	YES
	Claims		NO
Inventive step (IS)	Claims	1-19	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO

### 2. Citations and explanations

Document 1: JP, 2001-207261, A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.), 31 July 2001

Document 2: JP, 05-271920, A (NISSHIN STEEL CO., LTD.), 19 October 1993

Document 3: JP, 05-271921, A (NISSHIN STEEL CO., LTD.), 19 October 1993

Document 4: JP, 61-030663, A (DIRECTOR GENERAL, AGENCY OF INDUSTRIAL SCIENCE AND TECHNOLOGY), 12 February 1986

Document 5: JP, 2000-109969, A (DIRECTOR GENERAL OF NATIONAL RESEARCH INSTITUTE FOR SCIENCE AND TECHNOLOGY AGENCY), 18 April 2000

Document 6: Microfilm of the specification and drawings annexed to the written application of Japanese Utility Model Application No. 92407/1988 (Laid-open No. 14360/1990) (NISSHIN STEEL CO., LTD.), 29 January 1990

Document 7: JP, 56-041375, A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.), 18 April 1981

#### Claims 1-13

The subject matter of claims 1-13 is not disclosed in any of the documents cited in the ISR and is novel and involves an inventive step.

Document 1 pertains to deposited coating for a coated member, and describes making the cross-section shape of the barrel containing the coated member polygonal instead of round, thereby improving stirring efficiency and making it possible to obtain a uniform coating (see paragraph [0019]).

Nevertheless, the invention described in document 1 does not contemplate fine powder as the base material, and it assumes the barrel is mesh-like with an opening in the wall.

Therefore employing the technique described in document 1 in the spattering device that performs spattering film formation on powder while rotating a barrel as described in documents 2 and 3 could not easily be conceived by a person skilled in the art.

Also, this application's invention achieves the distinctive effect of uniformly coating a thin film of superfine particles with a very small particle size by spattering on fine powder using a polygonal barrel.

#### Claims 14-19

The subject matter of claims 14-19 is not disclosed in any of the documents cited in the ISR and is novel and involves an inventive step. In particular, the point about "manufacturing a microcapsule by removing the coated superfine particles or fine particles that form the matrix for the thin-film" in the inventions of claims 14-19 are not disclosed in documents 1-7; moreover, that point could not easily be conceived by a person skilled in the art based on documents 1-7.

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## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

The inventions relating to claims 14-19 are inventions of a microcapsule manufacturing method wherein, after a film is formed on a superfine particle surface, said particle is removed, and microcapsules are thus obtained. While there is some description in the specification regarding such microcapsule manufacturing method, in actuality, the specification does not describe specifically what kind of particles are used, what specific type of thin film is formed, and by what specific method the superfine particles are removed. Further, no objective data is presented showing obtainment of microcapsules. Therefore, the inventions of claims 14-19 are not sufficiently supported by the specification.